STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION – BUREAU OF AIR POLLUTION CONTROL

Director's Review and Preliminary Determination of Permit Issuance for

Lithium Nevada Corporation
Thacker Pass Project
Humboldt County, Nevada
October 18, 2021

Lithium Nevada Corporation (Li NV) submitted an application for a new Class II Air Quality Operating Permit, AP1479-4334, FIN A1270, for the Thacker Pass Project in Humboldt County, Nevada. The project is located approximately 18 miles west of Orovada, NV, in all or portions of Sections 1 and 12, Township 44N, Range 34E, M.D.B.&M, Sections 2 through 17, Township 44N, Range 35E, M.D.B.&M, and Sections 7, 8, 14 through 23, and 29, Township 44N, Range 36E, M.D.B.&M.

The purpose of this permitting action is to issue a new Class II Air Quality Operating Permit to Li NV to operate open-pit lithium mining and lithium processing operations designed to produce a lithium carbonate end product. The Li NV facility will recover lithium carbonate through ore crushing, acid leaching, and lithium processing. The on-site facilities will include a sulfuric acid plant to supply sulfuric acid for leaching. The sulfuric acid plant will also generate steam for energy that will provide power to support the Li NV facility.

The Nevada Division of Environmental Protection – Bureau of Air Pollution Control (BAPC) has reviewed the application for the above-referenced operating permit, and has made a preliminary determination to issue the operating permit. The facility-wide Potential to Emit (PTE), including emissions from Insignificant Activities are given in the table below.

	Thacker Pass Project Potential to Emit (PTE)		
	Pollutant		**Facility-Wide (tons/year)**
Current emissions estimates indicate Li NV is a *Class II source*, because the facility-wide PTE for any individual regulated pollutant is *less* than 100 tons per year.	**PM**	Particulate Matter	83.3
	PM_{10}	Particulate Matter ≤ 10 microns in diameter	52.4
	$PM_{2.5}$	Particulate Matter ≤ 2.5 microns in diameter	36.9
	SO_2	Sulfur Dioxide	47.8
	NO_x	Oxides of Nitrogen	88.7
	CO	Carbon Monoxide	2.52
	VOC	Volatile Organic Compounds	0.70
	H_2S	Hydrogen Sulfide	1.05
	H_2SO_4	Sulfuric Acid	25.2
	HAPs (all)	Hazardous Air Pollutants	0.032

The project is located in Air Quality Hydrographic Area (HA) 30A – Kings River Valley/Rio King and HA33A – Quinn River/Orovada. HA 30A and 33A are not triggered basins for an increment analysis.

Air dispersion modeling conducted by the applicant and the Nevada Division of Environmental Protection – Bureau of Air Quality Planning (BAQP) demonstrates that the operation of Li NV, will not violate any air quality standard.

Li NV must comply with all State and Federal air quality requirements and all conditions established within the proposed draft Class II Air Quality Operating Permit.